

Russian

40mm Grenades and Launchers

ADAM GEIBEL

Experiences from the second Chechen War set the tone for future ordnance. The Pribor Research and Production Center announced in May 2001 that it had developed a 40mm “cumulative” round for GP-25 and GP-30 under-barrel grenade launchers capable of piercing 60 to 70mm of armor. In addition to illuminating and training rounds, the Russian Military News Agency quoted Pribor chief engineer Vladimir Eggert as saying that the third new round would be thermobaric.

The effectiveness of a thermobaric 40mm grenade round will be an interesting problem in packaging. The 4.7kg Bulgarian 93mm RPG-7 thermobaric warhead creates a blast wave equivalent to that produced by the detonation of 2kg of TNT. A regular RPG-7 round weighs only 2.5kg, and a VOG-25 round has only 48 grams of high explosive.

Pribor produces the .25kg VOG-25 fragmentation grenade and the .278kg VOG-25P jumping fragmentation grenade. The impact fuse on these grenades is sensitive enough to work on snow, bog, and water surfaces.

However, a VOG-25P “bounces” to explode at the height of 0.5 to 1.5 meters (also reported as 1.5 to 2 meters). On striking the ground, the impact fuse fires a small charge of smokeless powder, blowing the main body of the grenade back into the air. As it does so, a short-delay fuse is ignited and after the grenade has risen about 1.5 meters, the high-explosive charge is detonated.

The “airburst” enhances its effectiveness, since half of the fragments of a regular HE grenade exploding on the ground bury themselves in the soil.

Sketches from *The New World of Russian Small Arms & Ammo*, by Charlie Cutshaw; used with permission of Paladin Press.

This feature is also useful for engaging personnel in open trenches.

The ammunition comes packed in 40-round boxes (known as “zincs”), and the market price of a VOG-25 fragmentation round was about U.S. \$30, while the training grenade was only \$15.

The illuminating round explodes at a height of about 100 meters and illuminates the area for 10 seconds, but the illumination radius was not mentioned.

The VOG rounds have no fixed cartridge case, but have a propellant charge with percussion primer at their base. This cuts down reloading time, because there is no casing to be ejected.

The Russian answer to the M-203 was the BG-15/GP-25 under-barrel grenade launcher “Kostyor” (Fire). Developed by Valery Telesh in 1972, mass production started in 1980. Nine P-25s are issued to each 47-man mechanized infantry platoon, and each grenadier usually has a basic load of 10 rounds.

After the First Chechen War (1994-1996), the Russian command found that its Naval Infantry units had paid little attention in training the marines to fire the GP-25 and considered it a major failure of the command echelon. (In 1997, the training emphasis was changed to rectify that problem as well as a list of other shortcomings).

Under-barrel grenade launchers—M203, GP-25 and GP-30 being the most popular—are considered effective weapons in many armies, but their rate of fire leaves something to be desired. After each shot, they have to be reloaded and are limited to 4 or 5 rounds per minute.

The Russians recognized this need for a greater rate of fire from their squad grenade launchers, particularly when confronted with ambushes initiated by command-detonated mines.

Inspired by the 40mm South African MGL-6, Tula’s Instrument Design Bureau State Unitary Enterprise offers a

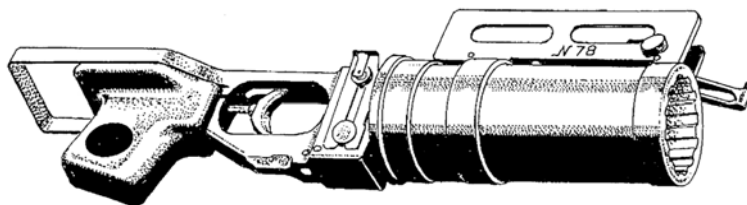


Figure 1. GP-25 under-barrel 40mm grenade launcher.



Figure 2. AKS-74U with GP-25 grenade launcher.

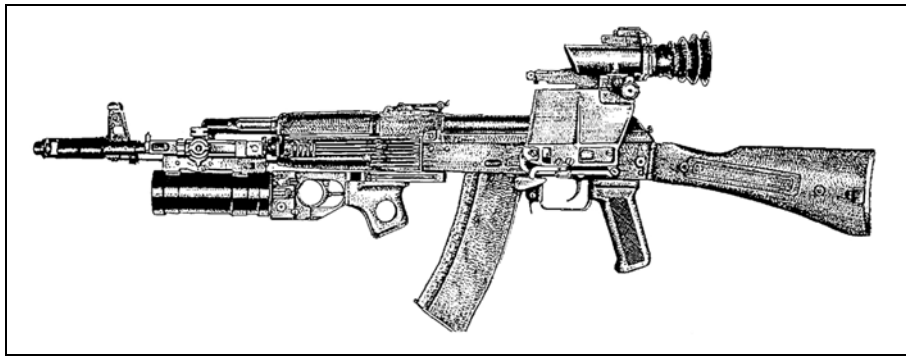


Figure 3. AK-74M with GP-25.

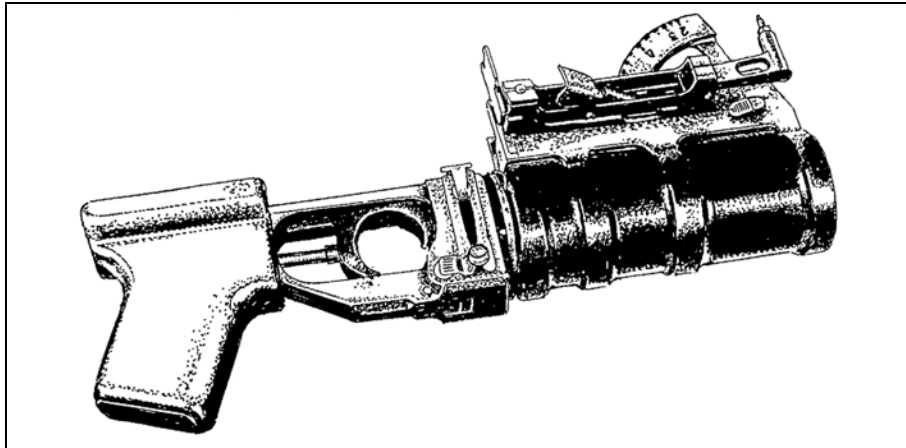


Figure 4. GP-30 under-barrel grenade launcher.

six-shot 40mm hand-held grenade launcher that fills the intermediate position between tripod-mounted automatic grenade launchers and under-barrel launchers. Originally known as the 6G-30, it is now advertised as the RG-6.

With a practical rate of fire of 15–18 rounds a minute, the RG-6 far outperforms its single-shot cousins. The 5.7kg RG-6 resembles a revolver, with the cylinder (or cassette) rotated by a spring.

It also features a self-cocking trigger mechanism and a sliding stock (combat length .78 meter, travel length .57 meter). The maximum effective range is 400 meters, while the GP-30 has a sighting range of 380 meters.

The Russians noted that South Africa's MGL-6 had a slower rate of fire, because the fired casings had to be manually extracted, and claimed that their VOP-25 grenade was three times as effective as the South African one.

But they felt that the most important advantage of the RG-6 over the MGL-6 was that for the same weight, the Russian weapon was made entirely of steel and did not malfunction if it was dropped.

Two RG-6 grenade launchers were used by the Russian army during the first incursion into Chechnya in 1994. Since then, small numbers of the weapon have worked their way into service, and the RG-6 is being heavily promoted for export sales, but with the designation of 6G-30.

Some fans claimed that this grenade launcher could have reversed the outcome of the March and April 2000 ambushes of the Moscow and Perm OMON columns in Grozny.

In early May 2000, a Russian TV program reconstructed the Grozny ambushes. They had set up six wooden targets representing Chechen fighters carefully concealed behind ruins or inside buildings, making them all inaccessible to the flat trajectory fire of the small arms carried by OMON troops. One soldier hit all the targets in 10 seconds with six shots from the grenade launcher. Two of the targets received direct hits from above, while the rest were sprayed by numerous fragments.

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Using Tactical Decision Games To Study Tactics

SUBMITTED BY CAPTAIN FRANK W. BREWSTER II

The use of tactical decision games (TDGs) to train leaders is not new; the technique can be traced back at least to the Chinese general and military theorist Sun Tzu, who was advocating their

use 500 years before the birth of Christ. Today the TDG has assumed new importance in allowing leaders to develop and sharpen their tactical skills without an extensive commitment of resources.

To be sure, experience is one of the most valuable aspects of teaching, but it is also often costly in terms of lives and materiel. The tactical and military history instruction, readings, and digital